



NOAA Fisheries Office of Protected Resources



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North Atlantic Right Whales (*Eubalaena glacialis*)

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Status

ESA Endangered - throughout its range

MMPA Depleted - throughout its range

Taxonomy

Kingdom: Animalia

Phylum: Chordata

Class: Mammalia

Order: Cetacea

Family: Balaenidae

Genus: *Eubalaena*

Species: *glacialis*

The [North Pacific right whale](#) (*Eubalaena japonica*) and [southern right whale](#) (*Eubalaena australis*) are other species of right whale.

Species Description

Right whales are large baleen whales. Adults are generally between 45 and 55 feet (13.7-16.7 m) in length and can weigh up to 70 tons (140,000 lbs; 63,500 kg). Females are larger than males. Calves are 13-15 feet (4-4.5 m) in length at birth.

Distinguishing features for right whales include a stocky body, generally black coloration (although some individuals have white patches on their undersides), lack of a dorsal fin, a large head (about 1/4 of the body length), strongly bowed margin of the lower lip, and callosities (raised patches of roughened skin) on the head region. Two rows of long (up to eight feet in length) dark baleen plates hang from the upper jaw, with about 225 plates on each side. The tail is broad, deeply notched, and all black with a smooth trailing edge.

Females give birth to their first calf at an average age of 9-10 years. Gestation lasts approximately 1 year. Calves are usually weaned toward the end of their first year. In the coastal waters off Georgia and northern Florida, calving occurs from December through March.

Using cross-sections of teeth is one way to age mammals. However, right whales have no teeth. Therefore, ear bones and, in some cases, eye lenses can be used to estimate age in right whales after they have died. It is believed that right whales live at least 50 years, but there are few data on the longevity of right whales. There are indications that closely related species may live over 100 years.

Right whales feed from spring to fall, and also in winter in certain areas. The primary food sources are zooplankton, including copepods, euphausiids, and cyprids. Unlike other baleen whales, right whales are skimmers: they feed by removing prey from the water using baleen while moving with their mouth open through a patch of zooplankton.

Habitat

Most known right whale nursery areas are in shallow, coastal waters. The [International Whaling Commission](#) has identified four categories of right whale habitats:

1. Feeding - areas with copepod and krill densities that routinely elicit feeding behavior and are visited seasonally
2. Calving - areas routinely used for calving and neonatal nursing
3. Nursery - aggregation area(s) where nursing females feed and suckle
4. Breeding - locations where mating behavior leading to conception occurs; breeding areas are not known for any population

Right whales have occurred historically in all the world's oceans from temperate to subpolar latitudes. They primarily occur in coastal or shelf waters, although movements over deep waters are known. For much of the year, their distribution is strongly correlated to the distribution of their prey. During winter, right whales occur in lower latitudes and coastal waters where calving takes place. However, the whereabouts of much of the population during winter remains unknown. Right whales migrate to higher latitudes during spring and summer.

Critical Habitat

In 1994, NMFS designated three areas as [critical habitat](#):

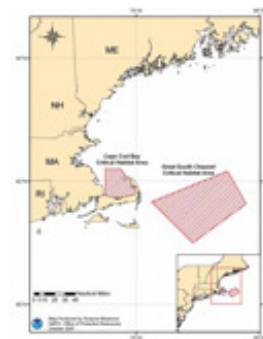
1. Coastal Florida and Georgia (Sebastian Inlet, FL to the Altamaha River, GA),
2. Great South Channel (east of Cape Cod), and
3. Massachusetts Bay and Cape Cod Bay



North Atlantic Right Whales
(*Eubalaena glacialis*)
Photo: NOAA

Did You Know?

- Right whales are the rarest of all large whale species and among the rarest of all marine mammal species.
- There are only ~300 right whales in the North Atlantic.
- Adult right whales are about 50 feet (15 m) long, and can weigh up to 70 tons (140,000 lbs; 63,500 kg).
- Right whales were severely depleted by commercial whaling: they have a thick layer of blubber, so they float when dead, making them an easy--and profitable--species for early whalers.



Right Whale Critical Habitat (NE)
(click for larger view PDF)

Distribution

North Atlantic right whales inhabit the Atlantic Ocean, particularly between 20° and 60° latitude.

The majority of individuals in the western North Atlantic population range from wintering and calving areas in coastal waters off the southeastern United States to summer feeding and nursery grounds in New England waters and north to the Bay of Fundy and Scotian Shelf. Five areas of "high use" were identified by NMFS in 1991 and are still key habitat areas for right whales:

1. Coastal Florida and Georgia,
2. Great South Channel,
3. Massachusetts Bay and Cape Cod Bay,
4. Bay of Fundy, and
5. Scotian Shelf

The eastern North Atlantic population may originally have migrated along the coast from northern Europe to the northwest coast of Africa. Historic records suggest that animals were heavily exploited by whalers from the Bay of Biscay (off southern Europe) and Cintra Bay (off the northwestern coast of Africa), as well as off coastal Iceland and the British Isles. During the early to mid 1900s, right whales were intensely harvested in the Shetlands, Hebrides, and Ireland. Recent surveys suggest right whales no longer frequent Cintra Bay or northern European waters. Due to a lack of sightings, current distribution and migration patterns of the eastern North Atlantic right whale population are unknown.



Right Whale Critical Habitat (SE)
(click for larger view PDF)

Population Trends

It is believed the western North Atlantic population numbers only about 300 individual right whales. It is unclear whether its abundance is remaining stable, undergoing a slight growth, or currently in decline. However, a recent model predicts that under current conditions, the population will be extinct in less than 200 years.

Although precise estimates of abundance are not available, it appears that the eastern North Atlantic population is nearly extinct, probably only numbering in the low tens of animals. It is unclear whether animals found in the eastern North Atlantic represent a "relict" population or whether all or some animals are individuals from the known western North Atlantic population.

Threats

[Ship collisions](#) and [entanglement in fishing gear](#) are the most common human causes of serious injury and mortality of western North Atlantic right whales. Additional threats may include habitat degradation, contaminants, climate and ecosystem change, and predators such as large sharks and killer whales. Disturbance from such activities as whale-watching and noise from industrial activities may affect the population. To reduce disturbance from boats, NMFS published [regulations](#) [pdf] in 1997 that prohibit vessels from approaching within 500 yards of right whales.




North Atlantic Right Whale
(*Eubalaena glacialis*)
Photo: NOAA Northeast Fisheries Science Center

Conservation Efforts

Right whales were first protected by the 1931 Convention for the Regulation of Whaling, which took effect in 1935. However, neither Japan nor the Soviet Union signed this agreement, so they were theoretically free to kill right whales.

In 1949, the [International Convention for the Regulation of Whaling](#)  protected right whales from commercial whaling.

In U.S. waters, right whales were determined as in danger of extinction in all or a significant portion of their range due to commercial over-utilization. As a result, they were listed as endangered under the Endangered Species Conservation Act in June 1970, the precursor to the ESA. The species was subsequently listed as endangered under the ESA in 1973. In the same year, the species was designated as depleted under the [Marine Mammal Protection Act \(MMPA\)](#). In 2008, NMFS listed the endangered **northern right whale** (*Eubalaena spp.*) as two separate, endangered species, [North Pacific right whale](#) (*E. japonica*) and North Atlantic right whale (*E. glacialis*) [pdf] ([73 FR 12024](#) [pdf]).

[Federal law](#) [pdf] and [Massachusetts state law](#)  prohibit approaching a right whale closer than 500 yards unless permitted by NMFS or one of the limited exemptions applies.

Additionally, the Atlantic Large Whale Take Reduction Team was established to develop a plan to reduce the incidental serious injury and mortality of right whales, as well as humpback, fin, and minke whales in the South Atlantic shark gillnet fishery, the Gulf of Maine and Mid-Atlantic lobster trap/pot fishery, the Mid-Atlantic gillnet fishery, and the Gulf of Maine sink gillnet fishery. For [more about the Atlantic Large Whale TRT](#), please visit the ALWTRT page on our Northeast Regional Office website.

Recovery Plan

The Northern Right Whale Recovery Team was appointed in July 1987. A Draft Recovery Plan for the Northern Right Whale (including both the North Atlantic and North Pacific right whales) was distributed for public comment in February 1990. Comments were received from Federal, state and local governments, conservation organizations, and private individuals. Appropriate comments were incorporated into the plan.

In December 1991, NMFS approved the Final Recovery Plan for the Northern Right Whale (including both the North Atlantic and North Pacific right whales). It identified known and potential factors affecting the right whale and recommended actions to reduce or eliminate impacts to the species.

The ultimate goal of the plan was to recover the species, with an interim goal of down-listing their status from "endangered" to "threatened."

The major actions recommended in the plan are:

- Reduce or eliminate injury or mortality caused by ship collision
- Reduce or eliminate injury and mortality caused by fisheries and fishing gear
- Protect habitats essential to the survival and recovery of the species
- Minimize effects of vessel disturbance
- Continue international ban on hunting and other directed take
- Monitor the population size and trends in abundance of the species
- Maximize efforts to free entangled or stranded right whales and acquire scientific information from dead specimens

NMFS revised the plan in 2005 for North Atlantic right whales. We are developing a separate recovery plan for the North Pacific right whale.

Regulatory Overview

The North Atlantic right whale (*Eubalaena glacialis*) has been listed as endangered under the ESA since 1973. It was originally listed as the "northern right whale" as endangered under the Endangered Species Conservation Act, the precursor to the ESA, in June 1970. The species is also designated as depleted under the [Marine Mammal Protection Act \(MMPA\)](#).



In 2008, NMFS listed the endangered ***northern right whale*** (*Eubalaena spp.*) as two separate, endangered species, North Pacific right whale (*E. japonica*) and North Atlantic right whale (*E. glacialis*) [pdf] ([73 FR 12024](#) [pdf]).

Key Documents

(All documents are in PDF format.)

Title	Federal Register	Date
ESA Listing Rule to List North Atlantic and North Pacific Right Whales as Separate Species (previously listed as "Northern Right Whales")	73 FR 12024	03/06/2008
Status Review: Right Whales in the North Atlantic and North Pacific Oceans	n/a	12/2006
Recovery Plan (as revised in 2005)	70 FR 32293	06/02/2005
Federal Regulations Governing the Approach to North Atlantic Right Whales	69 FR 69536	11/30/2004
Critical Habitat Designation: North Atlantic	59 FR 28805	06/03/1994
ESA Listing Rule (Northern Right Whales)	35 FR 18319	12/02/1970
Stock Assessment Reports	n/a	various

More Information

- [Reducing Ship Strikes / Mandatory Ship Reporting \(MSR\)](#)
 - [NOAA, USCG Provide Commercial Mariners with Free Interactive Guide to Right Whale Protection](#) [pdf]
- [Kids' Times: Right Whale](#) [pdf]
- [NMFS National Marine Mammal Laboratory Right Whale Information](#)
- [NOAA's National Marine Sanctuaries](#)
 - [Gray's Reef Sanctuary North Atlantic Right Whale Species Card](#)
 - [Monitor Sanctuary North Atlantic Right Whale Species Card](#)
- [Atlantic Large Whales Take Reduction Plan \(ALWTRP\)](#)
- [Environmental Impact Statement \(EIS\) on Right Whale Scientific Research](#)
- [Right Whale Sightings](#) (Northeast)
- [U.S. Fish & Wildlife Service Right Whale Species Profile](#)
- [Right Whale Listening Network at Cornell Lab of Ornithology](#) 
- Best, PB, Bannister, JL, Brownell Jr, RL and Donovan, GP, eds. 2001 "[Right Whales: Worldwide Status.](#)"  *The Journal of Cetacean Research and Management* (Special Issue): 2. Available from the International Whaling Commission

